

Moto Tools



QUALITY
ELECTRIC TOOLS

NOTICE

Due to conditions beyond our control prices in this catalog are subject to change.

CATALOG No. 22

Dremel Manufacturing Company
Racine, Wis., U.S.A.



A Proven

PRECISION, CORRECTLY-BALANCED ELECTRIC TOOL

The Moto-Tool

Before you buy a Moto-Tool—or any other electric motor-in-hand tool—ask yourself these nine **important** questions **vital** to any shopman or craftsman concerned with getting **his money's worth** in machine operation and performance.

- 1 Is the machine **really** fast enough to do every job **claimed** for it in a **workmanlike manner**? (It takes at least 25,000 R. P. M. to grind efficiently with small emery wheels. Wheels do not stand up with less speed.)
- 2 Is the machine **actually** correctly balanced so that it can be used for long periods of time, **without tiring the fingers or the wrist**?
- 3 Is the machine constructed so that it will be **comfortable** to hold—**even after hours of sustained use**?
- 4 Is the machine equipped with an **automatic chuck-lock release** to prevent it from burning out?
- 5 Is the machine provided with **every** construction requirement to make it **absolutely safe**?
- 6 Is the machine **really** vibrationless—able to perform exacting precision work?
- 7 Is the machine constructed to deliver **years of trouble-free service**?
- 8 Is the machine constructed so that the time and trouble of factory servicing of brush replacements is **unnecessary**?
- 9 Is the experience record of owners **satisfactory**?

These are the important considerations to look for in buying a motor-in-hand tool. Apply them critically—in reading through the pages of this booklet—and determine for yourself whether Moto-Tool is best equipped to satisfy your conception of what a good tool should be and do.

10 Day Free Trial and 90 Day Guarantee

We are not asking you to accept any statement we make for Moto-Tool as fact. You are urged to try Moto-Tool by actual first hand use to see for yourself that it delivers what we say it does. If your dealer is unable to demonstrate a machine—send direct for a 10 day money-back trial. We desire that you inspect, use, and compare Moto-Tool with any other machine—to convince yourself of its all-around superiority. If you are not completely satisfied, return the machine and your money will be promptly and cheerfully refunded. Every Moto-Tool carries a 90 day guarantee against any defect in workmanship or material.

Twenty Years of Specialization

Moto-Tool is made by skilled mechanics with especially designed equipment in a factory devoted exclusively to their manufacture. Twenty years of experience in the field of design and construction of small motor-in-hand electric appliances has resulted in the perfection of this machine which is in use today in every industrialized country in the world.

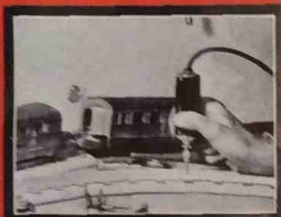
DREMEL MANUFACTURING COMPANY
RACINE, WISCONSIN

America's Exclusive Manufacturer of Electric Motor-in-Hand Tools





Model-makers find Moto-Tool indispensable for drilling, carving and grinding.



Train and airplane model hobbyists find many uses for Moto-Tool — Work can be done neater and faster.



Handy for sharpening all kinds of garden tools.



Repairs around the home can be done quicker and easier.



It is easy to engrave beautiful designs on glass.

YOU CAN DO MANY JOBS BETTER—FASTER—EASIER WITH MOTO-TOOL

Space does not permit showing all the illustrations of the hundreds of applications on which Moto-Tool can be used to a great advantage. Thousands of Moto-Tools are being used throughout the world in factories, schools, laboratories and also in private homecraft shops.

A REAL FACTORY TOOL

With Moto-Tool it is possible to work in places difficult to get at with other tools. Finish grinding and polishing of forming dies, molds and blanking dies, is an easy operation with this practical machine. In many cases, Moto-Tool pays for itself on the first job. Writing tool numbers on hardened steel and dies is another job that Moto-Tool does in record time.

Tools or cutters set up in large or small machines can be quickly touched up or sharpened, thus eliminating the necessity of tearing down the job.

Pattern makers find Moto-Tool to be a real time saver for working on wood and metal, and also for sharpening different shaped gouges and chisels.

GREATEST TOOL FOR THE HOMECRAFT AND MODEL-MAN

Homecraftsmen and model-makers on the alert to improve the quality of their work—as well as saving hours of time on every job—will find Moto-Tool the most important machine on the work bench. It will grind, drill, rout, carve, saw, engrave and polish on practically any material with amazing ease. Light in weight and easy to handle, it does in seconds jobs which are slow and difficult to do with ordinary hand tools. With Moto-Tool you can get a new thrill with your work, find more than ever that it wins the admiration of your family and the envy of fellow craftsmen.

Don't overlook Moto-Tool for the handyman's jobs around the house. It can pay for itself alone in a surprisingly short time.



Every sportsman will find Moto-Tool indispensable for repairing and polishing gun parts and fishing tackle.



You can engrave beautiful designs on all kinds of soft materials, including bakelite and other plastics.



You can sharpen knives, scissors and other household appliances.



Polishing golf clubs is another operation which can be done with Moto-Tool.



Moto-Tool will save a lot of time in shaping down different shapes of wood, plastics and other materials.

DREMEL Moto-Tool MODEL 1

Weights only 6 ounces

Speed about 25,000 R. P. M.

Instant-action, practical off-on switch. Can be operated with the same hand used in holding the machine.

Easily replaceable brushes—by the simple removal of screw caps. No shipment to the factory for servicing required.

Air cooling—provided by motor fan drawing air into rear housing and exhausting it through front vents—maintains tool running machine.

Wrenchless collet chuck—with large knurled collar for holding chuck when inserting accessories—provides easy, wrenchless means of changing tool. Handles all accessories.

Operates on any 110 volt Alternating or direct current.

Plugs in any socket. Can also be furnished for higher voltage if desired.

For light bench work, you need not compromise with an overweight, oversize motor-in-hand tool. This bantam Moto-Tool is designed for these jobs—and it asks no favor in handling any work. You can rely on it to operate without vibration, to deliver long, trouble-free service. At least 100% tighter than any other motor-in-hand tool delivering the same high speed, the Model 1 Moto-Tool is obviously easier to handle and provides greater accuracy for precision work. Check these facts to your own satisfaction through a dealer demonstration or a 10 day trial conviction test.

Price complete with Universal Chuck, one $\frac{1}{8}$ " Collet and one No. 8-52 Wheel Point

(WHEN ORDERING, STATE MODEL NUMBER)

Underwriters approved, heavy rubber cord, $6\frac{1}{2}$ feet in length—with soft rubber plug.

**10 DAY
FREE
TRIAL**

Shock-proof housing—highly polished black Bakelite, not metal—provides ABSOLUTE SAFETY.

Die cast, chromium plated rear and front ends.

Oil-less self-aligning bearings, mounted in felt oil retainers, provide trouble-free operation—exacting precision. Rear bearing is equipped with a hardened thrust bearing.

Easily replaceable twin case tempered spring collets, available in three sizes— $\frac{1}{8}$ ", $\frac{3}{32}$ ", and $\frac{1}{16}$ ". Any size accessory from $\frac{1}{64}$ " to $\frac{1}{2}$ " in diameter shank can be used with these three collets.

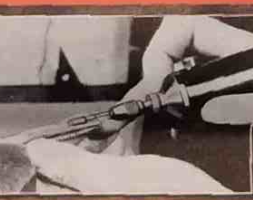
Patented



A handy tool for cleaning and polishing all kinds of jewelry and silverware.



Electricians can save time for undercutting mica between commutator segments and polishing contact points, jacks and relays.



Tools which would ordinarily have to be discarded, can be sharpened in a few minutes to exacting precision.



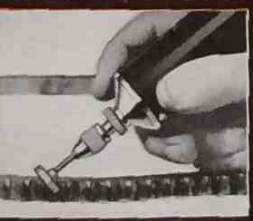
Moto-Tool can be used to a great advantage for sharpening all kinds of tools around the home.



Prevention of size a blasting or forming die is there to shape a corner which can be finished with a Moto-Tool.



With Moto-Tool you can write on hardened steel the same as you would with a pencil on paper.



Moto-Tool is used extensively in factories and shops for touching up all kinds of machine parts.

\$9.85

Model No. 2 Moto-Tool

A BETTER MACHINE FOR YOUR MONEY

MORE POWER—MORE SPEED

27,000 R.P.M.

Weighs only 13 ounces



Illustration
About Actual
Size.

10 DAY
FREE
TRIAL

FINGER GRIP

For holding Moto-Tool closer to the cutting end of the accessory. Slips on and off in a split second's time. Furnished with every Model No. 2 Moto-Tool.

MOTO-TOOL FEATURES

STURDY—100% Bakelite shock-proof housing.

ADVANCED AIR COOLING SYSTEM—Can be used continuously without overheating—Equipped with easily removable screen to prevent dust from entering motor.

BALANCED—Vibrationless (dynamic balanced) armature.

OVERSIZE ARMATURE SHAFT—Hardened, ground and polished.

TROUBLE PROOF BEARINGS—Oversize, oil-less, self-aligning. Large felt oil retainers provide lubrication. Hardened thrust bearing.

AUTOMATIC CHUCK LOCK PIN—Patented—No wrench required to hold chuck from turning. Disengages automatically. Leaving current on accidentally will not cause motor to burn out.

INSTANT ACTION WRENCHLESS CHUCK—Requires no extra parts for operation. Chuck is held with Chuck Lock Pin when unscrewing sleeve. Collets obtainable in three different sizes.

CORD—Underwriters' approved—6 ft. long with rubber plug.

SPEED—27,000 R.P.M.

WEIGHT—13 ounces.

SIZE—11/16" dia. x 6 5/8" overall.

CURRENT CONSUMPTION—88 watts.

SWITCH—Sliding type.

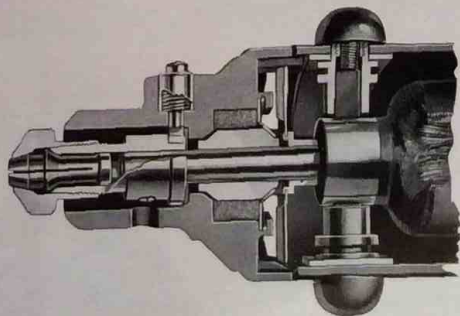
MOTO-TOOLS ARE LISTED BY UNDERWRITERS' LABORATORY.

A MOTO-TOOL FOR EVERY PURPOSE

Here is the ideal shop, laboratory, or work bench tool. You can use it for every kind of a job—on work that requires plenty of power or exacting precision. Light in weight, correctly balanced and right in design to easily fit the hand, this practical machine handles all accessories, works on practically every material. It delivers the right speed and power for successful grinding that adds extra life to emery wheel points and does a beautiful job of routing on practically any material.

It plugs in anywhere, runs on A.C. or D.C. current. The Motor is 110 Volt universal type—but other voltage can be furnished without extra charge.

Price complete with Chuck, one 1/8" Collet and one Emery Wheel, Point B-52, only **\$16.50**



STURDY CONSTRUCTION



Dremel Moto-Tool Kit

AVAILABLE IN TWO MODELS

Every craftsman will be proud to own this attractive modern tool kit that protects and safeguards his tools. Equipped with either model Moto-Tool and 23 of the most commonly used practical accessories for work on nearly all materials, this highly popular kit has a practical value for work at home, shop, school, or laboratory.

The quarter inch thick hardwood box is beautifully finished and is ruggedly built for years of service. The interior is neatly lined with heavy felt and is practically arranged for either Moto-Tool and accessories. Every craftsman will appreciate the all-around utility that this attractive kit offers for conveniently carrying and storing his tools. It really meets the exacting requirements of the all-around craftsman.

MOTO-TOOL KIT MODEL No. 1

This Kit contains one Model No. 1 Moto-Tool with $\frac{1}{8}$ " Collet, 4 Emery Wheel Points for grinding and marking, 1 Dressing Stone for dressing wheel points, 6 Carving Cutters for carving wood and other materials, 1 Saw, 3 Bristle Brushes for polishing and cleaning, 1 Screw Mandrel with Sanding Discs, 1 Shoulder Mandrel for attaching polishing wheels, 2 Engraving Cutters, one $\frac{1}{8}$ " Drum Sander, one $3/32$ " Collet, and one $1/4$ " Collet.

PRICE
COMPLETE
ONLY

\$17.50

MOTO-TOOL KIT MODEL No. 2

This Kit contains one Model No. 2 Moto-Tool with one $\frac{1}{8}$ " Collet, 4 Emery Wheel Points, 1 Dressing Stone, 8 Carving Cutters, 1 Saw, 3 Bristle Brushes, 1 Steel Brush for cleaning metals, 1 Screw Mandrel with Sanding Discs, 1 Shoulder Mandrel, one $\frac{1}{8}$ " Drum Sander, one $3/32$ " Collet, and one $1/4$ " Collet. PRICE OF BOX ONLY \$3.00

PRICE
COMPLETE
ONLY

\$23.50

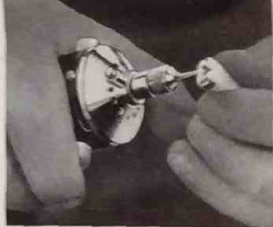


20 Piece Tool Set

A Practical Set for the All-Around Craftsman

With the accessories in this set, you can grind, rout, engrave, drill, polish and saw. Included in the set are: 4 Steel Cutters, 4 Emery Wheel Points, 1 Steel Saw, 3 Brushes, 1 Screw Mandrel, 1 Shoulder Mandrel, 1 Drum Sander, 2 Drills, 1 $1/4$ " Collet, and 3 $3/32$ " Collets.

Price Complete, only **\$5.75**



Dental MOTO-TOOL

When the work to be done calls for delicate exacting precision—as in many professional and laboratory operations, the Dremel Dental Moto-Tool unit is recommended.

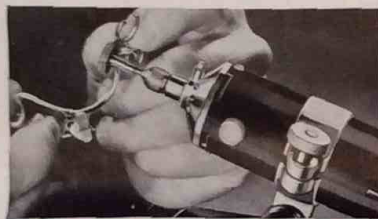
This machine is designed with a stub chuck—will take 3/32" shank tools only—best for extreme precision work—and can be used for either hand work or, when equipped with a stand, for bench laboratory work.

The high speed that Dental Moto-Tool delivers is especially advantageous when finishing and polishing porcelain, precious stones and modern, hard, alloy metals. THIS MACHINE IS ALSO RECOMMENDED FOR FINE DETAIL ENGRAVING AND CARVING.

Dentists and dental laboratory technicians find it a more than satisfactory auxiliary for work customarily done with dental engines.

If equipped with the 7-step foot Rheostat (such as listed on page 9), complete flexibility of speed may be obtained.

The Dental Moto-Tool Stand weighs 2½ pounds, is highly finished and is constructed so that Moto-Tool may be tilted to any desired angle.

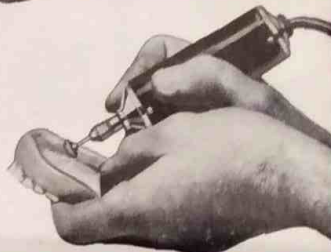


**DENTAL MOTO-TOOL WEIGHS
ONLY SIX OUNCES**

**HAS A SPEED OF 25,000 R.P.M.
HANDLES AS EASILY AS A PENCIL**

**Price of Dental Moto-Tool,
Only \$10.85**

**Dental Moto-Tool Stand,
Only 4.75**



UNIVERSAL MOTO-TOOL STAND

For Model No. 2 Moto-Tool

Accurate and dependable control over work is provided by the Universal Moto-Tool Stand. With this practical bench accessory, both hands are free for manipulating work over wheels or cutters. Moto-Tool can be set at any position or angle.

The stand is made of heavy cast iron and attractively finished. A hole is provided for fastening to the bench. The clamp opens readily to receive or release the Moto-Tool.

Price, Stand only \$4.50

SHAPING TABLE

For Model No. 2 Moto-Tool

Mounting the Moto-Tool vertically in the Universal Stand, this unique Shaping Table clamps firmly to the Moto-Tool. The table can be raised and lowered to accommodate the desired height in relation to the tool in the chuck.

With this table it is possible to rout and grind flat pieces to any desired shape.

If it is desired to rout or grind on a straight surface to a pre-determined depth, the Shaping Table attached to the Moto-Tool does an accurate, workman-like job and saves a lot of time.

Two finger grips are cast on to the Shaping Table for guiding it over the work. By merely loosening a nut, the Table is raised or lowered to fit the cutter to the desired depth.

Price, Shaping Table, only \$2.50

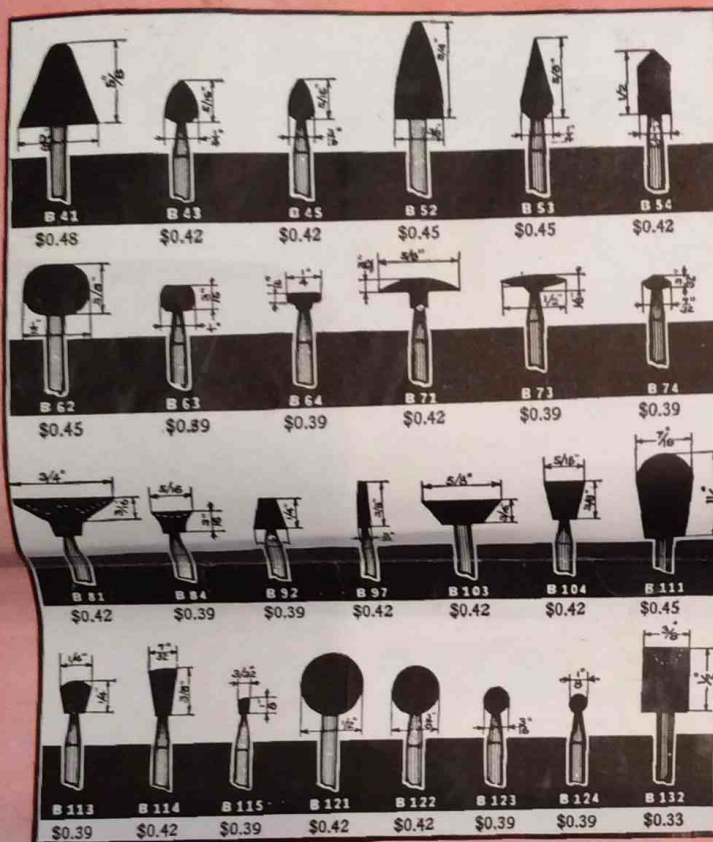




DREMEL SHAPED-TESTED ACCESSORIES are not to be confused with short lived unknown tools sold on price. They are a stronger, better product, deliver far more hours of service and are made by American workmen. In thousands of shops where real costs are determined by performance on the job—DREMEL accessories are being used.

EMERY WHEEL POINTS

All Dremel points are made of the best abrasive with proper grit and grain for grinding practically any kind of material. Varied shapes and sizes for any straight or irregular surface. All "B" and "W" numbers have shank, $\frac{1}{8}$ " Dia. x $1\frac{3}{8}$ " long.



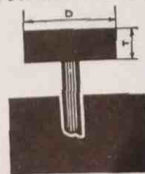
To obtain best results it is essential to have wheel points run perfectly true. First, clean out the collet, then dress the wheel with a dressing stone, No. A-15. A perfect running wheel, together with the high speed of Moto-Tool will give you splendid performance, and owing to the high speed, the wheels will wear longer.

SILICON CARBIDE WHEEL POINTS



The above wheel points have a $\frac{3}{32}$ " diameter by $1\frac{1}{2}$ " long shanks. The grit is very fine and the wheels are most suitable for grinding in small places on steel. They can also be used for marking hardened steel and for writing on glass.
Price for set of 12 in box.....\$3.50. Price each.....\$.35

PLAIN SHAPED WHEEL POINTS



Shape No.	Dia.	Thickness	Price Each
W143	$\frac{1}{8}$ "	$\frac{1}{8}$ "	\$0.33
W144	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W145	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.36
W146	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.36
W149	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W151	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W152	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W153	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W154	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W157	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W158	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W159	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W160	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W162	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W163	$\frac{1}{8}$ "	$\frac{1}{8}$ "	\$0.33
W173	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W174	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W175	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W176	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W181	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W182	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W183	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.30
W184	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W191	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W193	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.36
W200	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.33
W202	$\frac{1}{8}$ "	$\frac{1}{8}$ "	.36
W215	1"	$\frac{1}{8}$ "	.36

CUTTING WHEEL A-9



$\frac{1}{64}$ " Thick.

A handy Emery Wheel for slicing, cutting-off, and other operations.

Price, per dozen.....\$0.35

DRESSING STONE A-15



Emery Wheel Points will cut faster and smoother if dressed with the dressing stone.

Size: $\frac{1}{2}$ " Square by $1\frac{1}{2}$ " Long

A-15.....Price \$0.50

NEW IMPROVED Electric Scroll Saw

FOR ALL BOYS FROM 8 TO 80 YEARS OLD



STURDY



ONLY TWO
MOVING
PARTS



NEVER
NEEDS
OILING



Electric Moto-Saw

PAT. NO. 2233862

Just Guide It

AVERAGE CUTTING SPEED
ONE FOOT PER MINUTE

OPERATES ON 110-120 VOLT 50 OR 60
CYCLE ALTERNATING CURRENTS

(Does not operate on direct current)

Only

\$4.85

with 3 saw blades
COMPLETE
POSTPAID
Extra Saw Blades
50c Per Dozen

AS SAFE
TO HANDLE
AS A HAND SAW

More like magic than any tool you ever saw! Just imagine an electric jigsaw that takes no flailing . . . only a trifle heavier than a hand scroll saw, and better balanced in your hand . . . a tool that takes absolutely no effort to run, no perceptible pressure to feed. Imagine a saw blade running at such incredible speed that it seems to be standing still . . . that cuts a foot forward in a minute, yet takes only 1/3000 of an inch at each cutting stroke . . . each cut finer than the finest sandpaper. And then imagine such a magic tool being yours for less than \$5.00 . . . being able to run it with less electricity than a 75-watt lamp bulb.

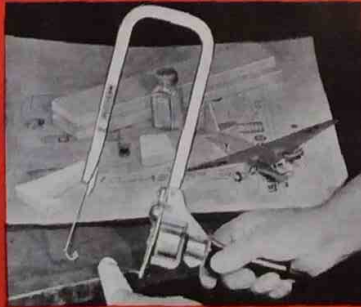
All this, and more, is yours in the new DREMEL electric MOTO-SAW. You have such easy, complete control that you can execute the most intricate designs, just as you would with a costly, complicated electric power saw. You have all the freedom of a free hand saw, yet none of the effort or difficulty of hand-power operation. You can cut at any

angle you like. You can cut along a spiral twist, as in shaping an airplane propeller. You don't have to bring work to the saw . . . you can take the saw to the work. You can work on a big assembled project or on the tiniest piece you can hold in your fingers. Plug it instantly into any electric outlet of standard voltage and frequency.

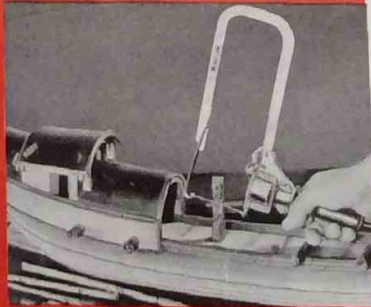
With the magic MOTO-SAW you need no sandpaper, for it cuts perfectly smooth. You need no oil can, for it has no bearings to oil. You need no bench room or floor space for it hangs up in less space than your hat, takes less room in a drawer than a shirt. You need use no special care in use, for it is as safe as a hand-saw. The touch of your thumb on the red button sets it going in a split second . . . release of the button stops the blade instantly. Whether you are a novice with no knowledge of tools, or a veteran craftsman in fine, fast work, a thrill awaits you when you feel the hang of MOTO-SAW in your hand and sense the surge of precision power at the press of your thumb. If your dealer cannot supply you, mail the coupon without delay. Send only \$4.85 for Moto-Saw and 3 blades, postpaid. Or send \$1 with order and pay postman balance plus postage. **MONEY BACK** if not delighted after inspection.



to effort at all to quickly make all sorts of cut-outs from 1/8" to 1/2" stock



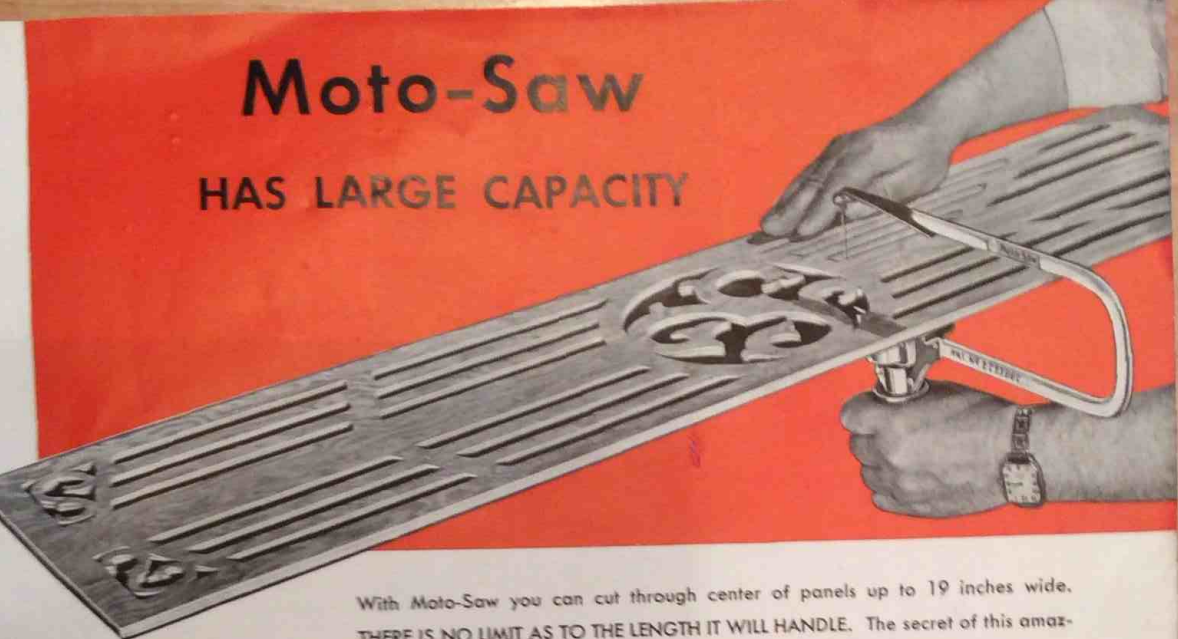
You'll find the Moto-Saw indispensable for detail sawing on airplane models



Just the thing for accurate model making . . . ideal for finishing touches

Moto-Saw

HAS LARGE CAPACITY



With Moto-Saw you can cut through center of panels up to 19 inches wide. THERE IS NO LIMIT AS TO THE LENGTH IT WILL HANDLE. The secret of this amazing performance lies in the new four-way blade holder which permits reversing the blade, or turning it toward either side at right angles to the frame. Thus, you can saw sideways as well as forward and backward. With Moto-Saw you can saw the most complicated designs which sometimes are impossible to do even on the most expensive type bench saws.

Moto-Saw Advantages

VERSATILE: MOTO-SAW is the only electrically driven hand jig saw on the market today. For the money invested, it is the most versatile tool that you can possibly add to your work shop. With it you can saw most any intricate design, cut at any desired angle and also on assembled projects.

POWERFUL: The magnetic motor develops 7,200 strokes per minute, cutting at high speed at an average of 12" per minute through medium hard wood or other material from $\frac{1}{8}$ " to $\frac{3}{4}$ " thick.

SIMPLE AND DURABLE: MOTO-SAW is sturdily built, has only two moving parts, has no shafts, cranks, bearings or gears to wear and therefore does not require oiling. With ordinary care, it will give you many years of service.

LARGE CAPACITY, LIGHT IN WEIGHT: MOTO-SAW weighs only 17 ounces. You can cut through the center of panels up to 19 inches wide. There is no limit to the length it will handle. You can saw sideways as well as forward and backward.

SAW BLADES: Only top quality blades are used, yet they cost no more than others. The entire length of saw blades can be used with MOTO-SAW—unlike other power saws. Saw cuts are only about the width of a pencil mark, and perfectly smooth, requiring no sanding.

SAFE: MOTO-SAW is as safe to use as a hand saw. A slight pressure on the automatic switch, in the handle, instantly stops and starts motor.

ECONOMICAL: You pay only \$4.85 for MOTO-SAW with 3 saw blades—a remarkable power tool saving! Current consumption is about 75 watts.

GUARANTEED: MOTO-SAW is guaranteed for 90 days against faulty material and workmanship. Made by the makers of the famous "MOTO-TOOL" line, known the world over, and backed by 20 years of experience in the design and manufacture of electrical appliances, MOTO-SAW is worthy of your trial. Once tried—you'll never part with it.



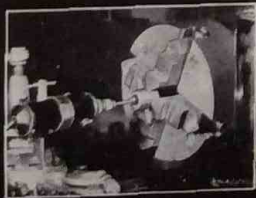
The Moto-Saw makes intricate designs easy—accurate better work and finer finish



Speeds up and simplifies the making of attractive brackets, ornaments and novelties



DREMEL MFG. CO.
RACINE, WIS.
U. S. A.



Printed in U. S. A.